1N4148WT

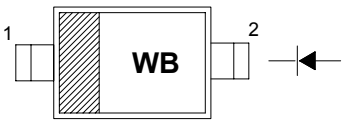
SURFACE MOUNT FAST SWITCHING DIODE

Features

- Fast Switching Speed.
- Ultra-Small Surface Mount Package.
- For General Purpose Switching Applications
- High Conductance

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code: "**WB**"
Simplified outline SOD-523 and symbol

Mechanical Data

- Case: SOD-523, Plastic
- Moisture Sensitivity : Level 1 per J-STD-020A
- Polarity : Cathode Band
- Terminals: Finish – Matte Tin
  Solderable per MIL-STD-202, Method 208

Absolute Maximum Ratings (T_j = 25℃)

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Reverse Voltage	V_R	75	V
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current	I_{FM}	250	mA
Average Rectified Output Current	I_O	125	mA
Non-Repetitive Peak Forward Surge Current @ t=1.0μs @ t=100㎳	I_{FSM}	2.0 1.0	A
Power Dissipation	P_{tot}	150	mW
Thermal Resistance Junction to Ambient Air	$R_{\Theta JA}$	833	℃/W
Operating Temperature Range	T_J	-65 to +150	℃
Storage Temperature	T_s	-65 to +150	℃

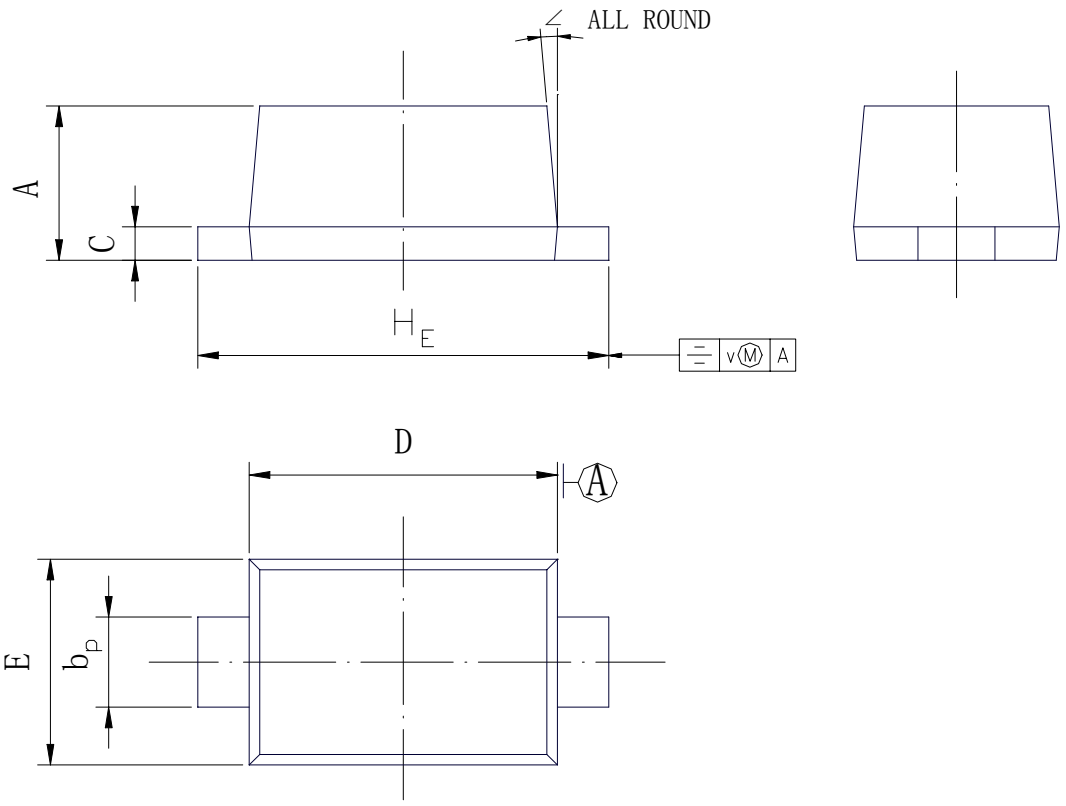
Characteristics at T_j = 25 ℃

Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Reverse Breakdown Voltage[1)]	I_R = 1.0μA	$V_{(BR)R}$	75	-	-	V
Forward Voltage	I_F = 1.0mA	V_F	-	-	0.715	V
	I_F = 10mA		-	-	0.855	
	I_F = 50mA		-	-	1.0	
	I_F = 150mA		-	-	1.25	
Peak Reverse Current[1)]	V_R = 75V	I_R	-	-	1.0	μA
	V_R = 75V, T_J=150℃		-	-	50	μA
	V_R = 25V, T_J=150℃		-	-	30	μA
	V_R = 20V		-	-	25	nA
Total Capacitance	V_R = 0V ,f = 1MH$_Z$	C_T	-	-	2.0	pF
Reverse Recovery Time	I_{rr} = 0.1x I_R, I_F = I_R =10mA, R_L = 100 Ω	t_{rr}	-	-	4.0	ns

1) Short duration pulse test used to minimize self-heating effect.

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads **SOD-523**



UNIT	A	b_p	C	D	E	H_E	v	∠
mm	0.70 0.60	0.4 0.3	0.135 0.127	1.25 1.15	0.85 0.75	1.65 1.55	0.1	5°